

Background and Planning Evaluation

Background and Site Context

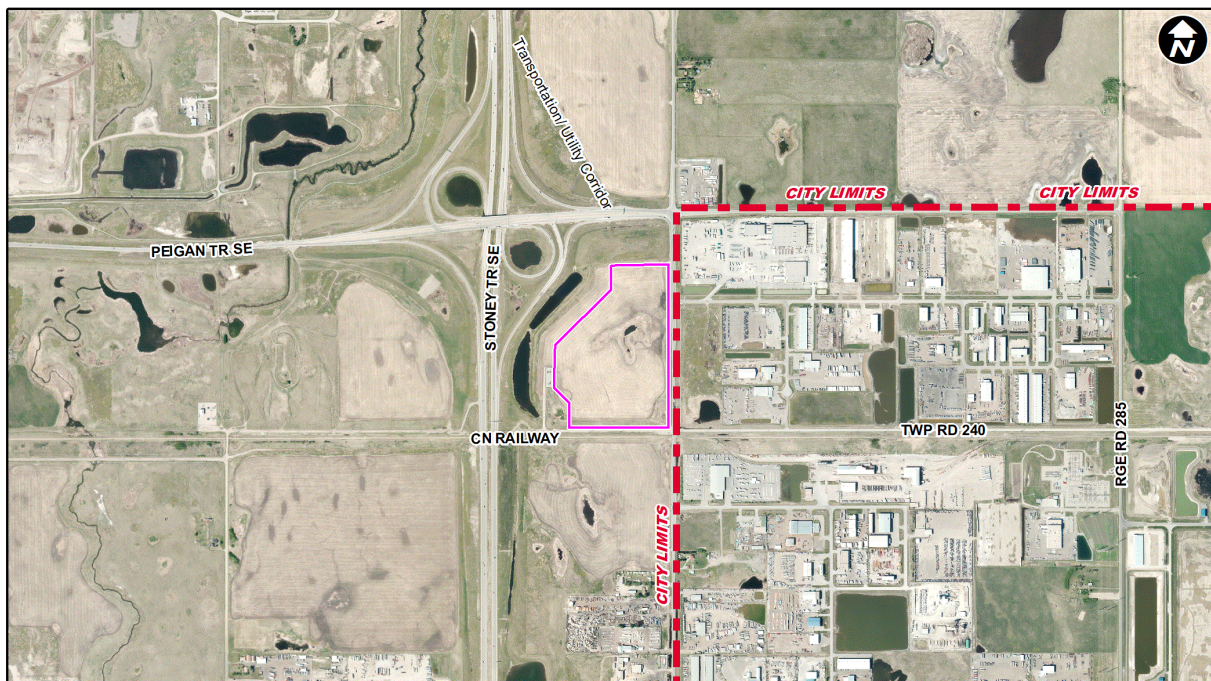
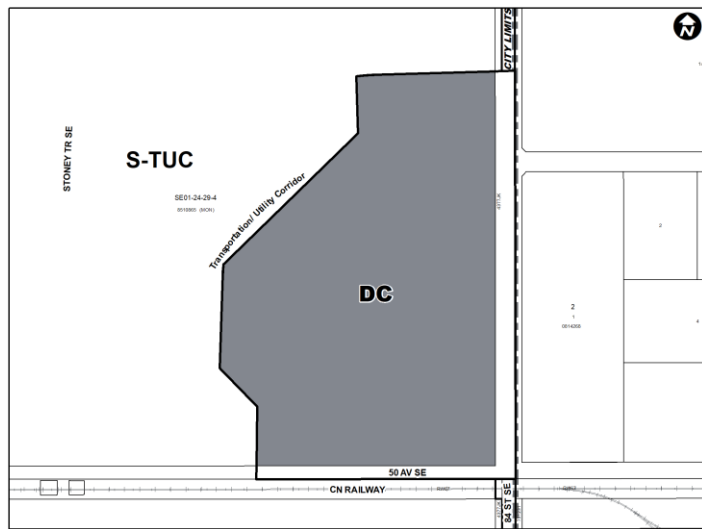
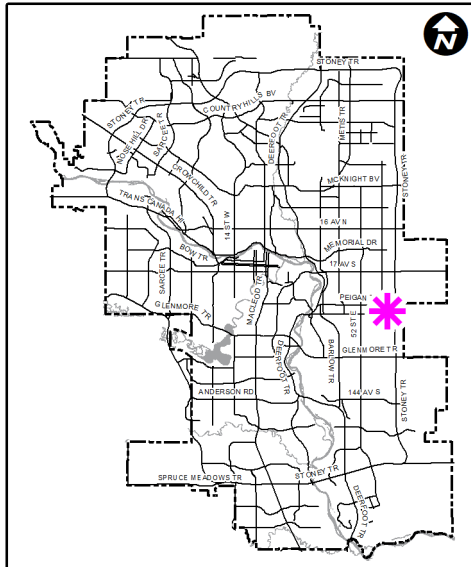
The subject site is located south and east of Peigan Trail SE and Stoney Trail SE respectively. The site is adjacent to the city boundary with Rocky View County at 84 Street SE on the east, and to the south is 50 Avenue SE. Site access is available from 84 Street SE and 50 Avenue SE. The approximately 20.18-hectare site is owned by the City of Calgary and was approved for industrial development with the Great Plains Industrial Outline Plan application by Calgary Planning Commission on 2022 May 05. The parcel was subsequently redesignated to the Industrial – General (I-G) District on 2022 July 05 as part of the same outline plan and land use redesignation application (LOC2017-0305).

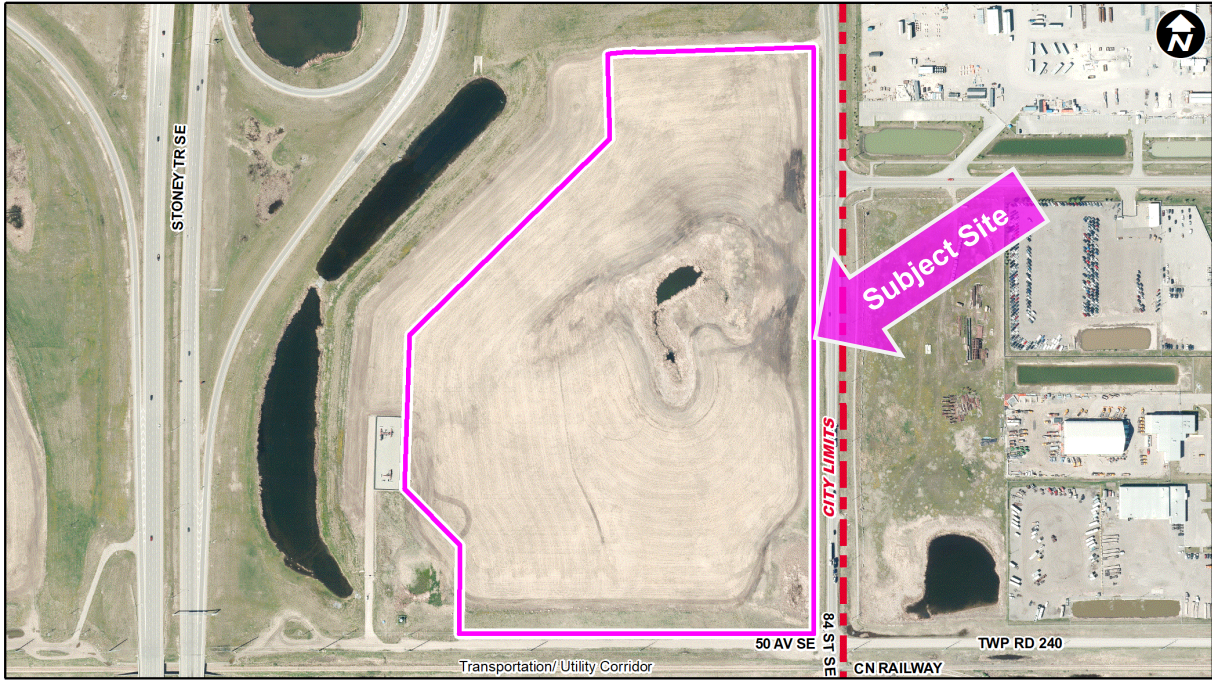
Future Energy Park has entered into a purchase agreement with the City of Calgary to acquire the subject site for their bioethanol plant and cogeneration facility. They have retained QuantumPlace Developments to manage this redesignation application for the subject site to accommodate the future development with the unique combination of existing and new defined uses in a proposed Direct Control (DC) District.

Community Peak Population Table

Not available because the subject area is designated for industrial uses.

Location Maps





Previous Council Direction

None.

Planning Evaluation

Land Use

The existing I-G District accommodates a wide range of light and medium general industrial uses with a maximum floor area ratio of 1.0. There is no maximum building height in the I-G District.

The proposed DC District is based on the Industrial – Heavy (I-H) District with the new defined uses of “Energy Cogeneration Facility,” “Industrial Distillery Facility” and “Waste Processing Facility” in addition to the Fertilizer Plant, Power Generation Facility – Large and Sewage Treatment Plant uses already listed in the Land Use Bylaw.

The DC District is based on the I-H District, which is intended to accommodate primarily large, purpose built, heavy industrial developments that typically locate close to hazardous goods routes and rail lines. The I-H District is considered an appropriate base for this DC District because of its location directly adjacent to Stoney Trail SE and Peigan Trail SE, as well as the existing rail line along 50 Avenue SE just south of the subject site. Additionally, many of the uses that are expected to occur on the site are consistent with the types of uses that would be expected in the I-H District.

Administration carefully assessed the facility’s unique requirements against the defined uses in the Land Use Bylaw. Existing uses that were most consistent with the facility’s desired functions were incorporated into the district where possible. However, new use definitions were required to accommodate the desired functions of future development.

The “Energy Cogeneration Facility” use is based on the existing General Industrial – Heavy use with added activities such as:

- the distillation of liquids or chemicals and the capture and processing of the by-products, which is necessary to produce bioethanol (this is not the same as the existing “Brewery, Winery and Distillery” use in the Land Use Bylaw as this is not intended for the production of alcoholic beverages for human consumption);
- research, analysis, development and testing of materials or substances, which is also a necessary component of the bioethanol production process;
- the processing of collected or discarded goods and materials that may include recyclables or agricultural waste that may involve chemicals or the application of heat; and
- the capture and temporary storage of carbon dioxide that is produced by the plants.

The “Industrial Distillery Facility” use is based on the existing Refinery use but has been modified to reference the refining of bioethanol and natural gas rather than crude oil, used motor oil or natural gas.

The “Waste Processing Facility” use is based on the existing Hazardous Waste Management Facility use definition with the specification that the hazardous waste that is being processed has been produced on-site. This definition differs from the existing Hazardous Waste

Management Facility definition is specified as using hazardous waste that has been produced off-site.

Pursuant to Section 20 of the Land Use Bylaw 1P2007, this application for a DC District has been reviewed by Administration and the use of a DC District is necessary to provide for the applicant's proposed development due to the unique nature of the development and the use of direct control specific uses. This proposal allows for the applicant's intended project while maintaining the I-H District base. The same result could not be achieved using a standard land use district in the Land Use Bylaw.

The proposed DC District includes a rule that allows the Development Authority to relax Sections 7 through 11 of the DC District. Section 7 incorporates the rules of the base district in Bylaw 1P2007 where the DC District does not provide for specific regulation. In a standard district, many of these rules can be relaxed if they meet the test for relaxation of Bylaw 1P2007. Sections 8 through 10 contain setback requirements that are different than the standard setbacks required in the I-H District. Section 11 addresses the minimum number of parking stalls that will be determined through a Parking Study at the time of development permit. The intent of this DC District rule is to ensure that rules of Bylaw 1P2007 that regulate aspects of development that are not specifically regulated in this DC District can also be relaxed in the same way that they would be in a standard district.

Development and Site Design

This proposed land use redesignation would enable the development of *Future Energy Park* to produce bioethanol through the distillation of low-grade wheat feedstock and pipeline quality renewable natural gas (RNG) through the anaerobic digestion of wheat stillage feedstock (by-product of the bioethanol process). Digestate (a by-product of the RNG process) will also be produced for use as cattle feed.

The rules of the proposed DC District would provide guidance for the development of the site, including appropriate uses, building height and massing, landscaping, parcel coverage, and parking.

Transportation

Pedestrian and vehicular access to the site is available via 50 Avenue SE and 84 Street SE. 84 Street SE is classified as an Arterial Street and 50 Avenue SE is classified as an Industrial Street as per the Calgary Transportation Plan. The site is also adjacent to an existing regional pathway on 84th Street SE. A Transportation Impact Assessment (TIA) was submitted in 2022 as part of a previous land use amendment application. The submitted TIA indicated that upgrades to both 84 Street SE and 50 Avenue SE will be required to support the development. Details regarding the road upgrades will be finalized at the subdivision or development permit stage.

Environmental Site Considerations

The environmental site conditions of this development were previously reviewed and addressed with the Great Plains / Starfield Outline Plan boundaries (LOC2017-0305). The existing site conditions are suitable for the proposed uses. This is a greenfield site which has remained in a natural condition with limited agricultural uses in the past.

Utilities and Servicing

The subject site falls within the Great Plains / Starfield Outline Plan boundaries (LOC2017-0305). Upon subdivision or future development applications, all relevant conditions of the Outline Plan will be applied, including, but not limited to the entering into a development agreement to construct the required public utilities and roadways to service the plan area and make payment of applicable levies. Limited servicing is currently available, main extensions to meet the site's servicing needs are required as per LOC2017-0305.

Legislation and Policy

South Saskatchewan Regional Plan (2014)

The recommendation by Administration in this report has considered and is aligned with the policy direction of the [South Saskatchewan Regional Plan](#) which directs population growth in the region to Cities and Towns and promotes the efficient use of land.

Growth Plan (2022)

The recommendation aligns with the policy direction of the Calgary Metropolitan Region Board's [Growth Plan](#) (GP). The proposed land use amendment builds on the principles of the GP by promoting efficient use of land and regional infrastructure, and establishing strong, sustainable communities.

Municipal Development Plan (Statutory – 2009)

The [Municipal Development Plan](#) (MDP) identifies this site as a Standard Industrial Area and calls for a mix of industrial uses at varying intensities, with the industrial character of the area maintained as the area redevelops. Policies for the area reinforce the need to allow a variety of industrial uses in the area, and to provide a range of mobility options.

Rocky View County/City of Calgary Intermunicipal Development Plan (2012)

In the [Rocky View County/City of Calgary Intermunicipal Development Plan](#), the site is within the 'Policy Area' on Map 1: Policy Area. Subsection 6.1.4 states, "Intermunicipal entranceways are important features for both municipalities. Special consideration should be given to the interface in these areas. Development should be encouraged to align with the entranceway guidelines of each respective municipality." The future development application will be expected to comply with this policy and ensure that the development meets the expectations outlined above.

Climate Strategy (2022)

Administration has reviewed this application in relation to the objectives of the [Calgary Climate Strategy – Pathways to 2050](#) programs and actions. The nature of the development, which creates bioethanol fuel from agricultural waste products, creates renewable natural gas, and includes the capture of carbon dioxide produced by the plant supports "Program 3: Developing food resilience" and "Program 12: Supporting the climate resilience of Calgary's and The City's third-party utilities" of the *Climate Strategy*.

Shepard Industrial Area Structure Plan (Statutory – 2009)

The site is within an Industrial/Business Area on Map 3: Land Use Concept in the [Shepard Industrial Area Structure Plan](#) (ASP), which is intended to provide a wide variety of general industrial and business uses within the context of a fully-serviced industrial/business park. The proposal is generally consistent with the intent of the Industrial/Business Area and the policies of the ASP.